

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (currently amended): An interfacing device that integrates ~~feeders~~ feeder mechanisms and surface mount machines of differing manufacture, the interfacing device comprising:

~~a carriage (10)~~ a carriage to which a feeder plate mechanism ~~(12) (12)~~ is mounted, wherein said carriage provides external feeder ~~connectors (34)~~ connectors from ~~the surface~~ a surface mount machine to the feeder plate ~~mechanism (12)~~ mechanism; and

a plurality of feeder mechanisms ~~(40) which~~ that are received by said feeder plate ~~mechanism (12), and~~ mechanism, wherein said feeder mechanisms provide ~~(40) provides~~ internal feeder connectors ~~(26) from~~ from said feeder plate mechanism ~~(12) to~~ to said plurality of feeder ~~mechanisms (40),~~ mechanisms, and wherein said feeder plate mechanism ~~(12) adapts~~ adapts said external feeder connectors ~~(34) to~~ to said internal feeder ~~connectors (26)~~ connectors.

2. (currently amended): The interfacing device of Claim 1, wherein said external feeder ~~connectors (34)~~ connectors comprise pneumatic and electrical connections.

3. (currently amended): The interfacing device of Claim 1, wherein said internal feeder ~~connectors (26)~~ connectors comprise pneumatic and electrical connections.

4. (currently amended): The interfacing device of Claim 1, wherein a switch within the surface mount ~~machines allows~~ machine is configured to enable an operator to select a type of feeder mechanism within said interface device.

5. (currently amended): The interfacing device of Claim 1, wherein positioning ~~pins (32)~~ pins within said interfacing device align components coupled by said internal feeder connectors ~~(26) and~~ and said external feeder ~~connectors (34)~~ connectors.

6. (currently amended): The interfacing device of Claim 1, wherein said feeder plate mechanism ~~(12) further~~ comprises a top plate assembly used to couple said feeder plate mechanism ~~(12)~~ mechanism to the surface mount machine.

7. (currently amended): The interfacing device of Claim 1, wherein said carriage ~~(10) further~~ comprises a tape ~~dump (14)~~ dump operable to catch spent feeder tape expended by one of the feeder mechanism mechanisms.

8. (currently amended): The interfacing device of Claim 1, wherein said carriage ~~(10) further~~ comprises ~~casters (28) that allow~~ rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine.

9. (currently amended): The interfacing device of Claim 1, wherein said feeder plate mechanism ~~(12) further~~ comprises ~~mechanical~~ one or more locks to secure said feeder mechanisms ~~(40) within~~ within said feeder plate ~~mechanism (12)~~ mechanism.

10. (currently amended): The interfacing device of Claim 1, wherein said carriage ~~(10) comprises~~ comprises a frame of adjustable height.

11. (currently amended): A method of interfacing and integrating ~~feeders~~ feeder mechanisms to surface mount machines of differing manufacture, the method comprising the steps of:

mounting a feeder plate ~~mechanism~~ (12) mechanism to a carriage, wherein said ~~carriage~~ (10) carriage provides external feeder ~~connectors~~ (34) connectors from ~~the surface~~ a surface mount machine to the feeder plate mechanism; ~~mechanism (12); and~~

connecting a plurality of feeder ~~mechanisms~~ (40) mechanisms to said feeder plate ~~mechanism~~ (12) mechanism, wherein said feeder ~~mechanisms~~ (40) mechanisms couple to said feeder plate ~~mechanism~~ (12) mechanism via internal feeder ~~connectors~~ (26); connectors, and wherein said feeder plate ~~mechanism~~ (12) adapts adapts said external feeder ~~connectors~~ (34) connectors to said internal feeder ~~connectors~~ (26); and connectors;

coupling said ~~carriage~~ (10) carriage to the surface mount machine, and

selecting via a switch within the surface mount machine the type of feeders contained within said feeder plate ~~mechanism~~ (12) mechanism.

12. (currently amended): The method of Claim 11, wherein said external feeder ~~connectors~~ (34) connectors and said internal feeder ~~connectors~~ (26) connectors comprise pneumatic and electrical connections.

13. (currently amended): The method of Claim 11, wherein positioning ~~pins~~ (32) pins within said interfacing device align components coupled by said internal feeder ~~connectors~~ (26) and and said external feeder ~~connectors~~ (34) connectors.

14. (currently amended): The method of Claim 11, wherein said feeder plate ~~mechanism~~ (12) further comprises a top plate assembly used to couple said feeder plate ~~mechanism~~ (12) mechanism to the surface mount machine.

15. (currently amended): The method of Claim 11, wherein said carriage ~~(10) further~~ comprises a tape ~~dump~~ (14) dump operable to catch spent feeder tape expended by one of the feeder ~~mechanism~~ mechanisms.

16. (currently amended): The method of Claim 11, wherein said carriage-(10) ~~further comprises casters (28) that allow~~ rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine.

17. (currently amended): The method of Claim 11, wherein said feeder plate mechanism-(12) ~~further comprises mechanical~~ one or more locks to secure said feeder mechanisms-(40) ~~within~~ within said feeder plate ~~mechanism (12)~~ mechanism.

18. (currently amended): The method of Claim 11, wherein said carriage-(10) ~~comprises~~ comprises a frame of adjustable height.

19. (currently amended): An interfacing device that integrates ~~feeders~~ feeder mechanisms and surface mount machines of differing manufacture, the interfacing device comprising:

~~a carriage (10)~~ a carriage to which a feeder plate ~~mechanism (12)~~ mechanism is mounted, wherein said ~~carriage (10)~~ carriage provides external feeder connectors-(34) ~~from the~~ from a surface mount machine to the feeder plate ~~mechanism (12)~~, ~~wherein~~ mechanism, and ~~wherein~~ said external feeder ~~connectors (34)~~ connectors comprise pneumatic and electrical connections;

a plurality of feeder mechanisms-(40) ~~which~~ that are received by said feeder plate ~~mechanism (12)~~, and mechanism, wherein said feeder mechanisms provide (40) ~~provides~~ internal feeder connectors-(26) ~~from~~ from said feeder plate ~~mechanism (12)~~ mechanism to said plurality of feeder ~~mechanisms (40)~~ mechanisms, wherein said internal feeder ~~connectors (26)~~ connectors comprise pneumatic and electrical connections, wherein said feeder plate mechanism (12) ~~adapts~~ adapts said external feeder ~~connectors (34)~~ connectors to said internal feeder ~~connectors (26)~~ connectors, and wherein mechanical stops and positioning ~~pins (32)~~ pins secure said feeder ~~mechanisms (40)~~ mechanisms within said feeder plate ~~mechanism (12)~~ mechanism; and

a means for selecting a type of feeder mechanism contained within said interface device.

20. (currently amended): The interfacing device of Claim 19, wherein said carriage ~~(10) further~~ comprises:

a ~~tape-dump (14) dump~~ operable to catch spent feeder tape expended by one of the feeder-mechanism mechanisms;

~~casters (28) that allow~~ rolling members that are configured to enable an operator to easily reposition the interfacing device to and from the surface mount machine; and

a means for adjusting a height of said carriage.

21. (new): The interfacing device of Claim 8, wherein said rolling members are casters.

22. (new): The method of Claim 16, wherein said rolling members are casters.

23. (new): The interfacing device of Claim 20, wherein said rolling members are casters.